WHAT IS CLAIMED IS:

1.   A driving method of an electro-optic element for allowing said electro-optic element to display a level of grayscale said electro-optic element should display throughout a frame period by switching ON said electro-optic element during a period corresponding to grayscale data that defines said level of grayscale, said method being characterized by comprising:

a selecting step of sequentially selecting, according to said grayscale data, a plurality of first sub-field periods continuous with respect to one another and a plurality of second sub-field periods continuous with respect to one another used for securing the period corresponding to said grayscale data, said plurality of second sub-field periods following consecutively said plurality of first sub-field periods, each of said plurality of second sub-field periods substantially corresponding to a length of a sum of said plurality of first sub-field periods and any one of the first sub-field periods, in a direction from a first sub-field period and a second sub-field period positioned abut on a boundary of said plurality of first sub-field periods and said plurality of second sub-field periods toward a first sub-field period and a second sub-field period at a remotest position from said boundary; and

a driving step of switching ON said electro-optic element during said sub-field periods selected.

2.   The driving method of an electro-optic element according to Claim 1, wherein said plurality of first sub-field periods and said plurality of second sub-field periods are included in a same frame period.

3.   The driving method of an electro-optic element according to Claim 1, wherein a part of sub-field periods of said plurality of first sub-field periods and said plurality of second sub-field periods are included in one frame period of two continuous frame periods, and a rest portion of sub-field periods are included in the other frame period.

4.   The driving method of an electro-optic element according to Claim 3, wherein said part of sub-field periods belongs to one@of said plurality of first sub-field periods and said plurality of second sub-field periods, and said rest portion of sub-field periods belongs to the other thereof.

5.   The driving method of an electro-optic element according to Claim 1, wherein, in said driving step, a period during which said electro-optic element is switched ON is inserted in said boundary regardless of said grayscale data.

6. The driving method of an electro-optic element according to Claim 1, wherein, in said driving step, a period during which said electro-optic element is switched OFF when said grayscale data shows 0 and switched ON at other time is inserted in said boundary.

7. The driving method of an electro-optic element according to Claim 1, wherein, when said second sub-field periods are selected in said selecting step,

in said driving step, of said second sub-field periods selected, at least one second sub-field period is divided into a plurality of divided periods to be switched ON.

8. The driving method of an electro-optic element according to Claim 7, wherein, in said driving step, of said second sub-field periods selected, a second sub-field period positioned near said boundary is divided with priority to be switched ON.

9. The driving method of an electro-optic element according to Claim 8, wherein, when two or more of said second sub-field periods are selected in said selecting step,

in said driving step, of said two or more second sub-field periods selected which are second sub-field periods adjacent to each other, a second sub-field period farther from said boundary is divided to be switched ON with the number of division made equal to or less than the number of division of a second sub-field period nearer said boundary.

10. The driving method of an electro-optic element according to Claim 7, wherein, in said driving step, all of said second sub-field periods selected are divided to be switched ON.

11. The driving method of an electro-optic element according to Claim 7, wherein, in said driving step, at least one divided period of said plurality of divided periods is equivalent to one first sub-field period.

12. The driving method of an electro-optic element according to Claim 1, wherein:

said grayscale data is composed of N bits (N is an integer not less than 2) to define a level of grayscale having 2 to the N'th power kinds;

high-order M bits in said N bits define a level of grayscale said plurality of second sub-field periods should display;

low-order (N – M) bits in said N bits define a level of grayscale said plurality of first sub-field periods should display; and

said M is an optimal solution of M given on an assumption that said frame period includes $(2^{N-M} - 1)$ first sub-field periods.

13. The driving method of an electro-optic element according to Claim 1, wherein: said grayscale data is composed of N bits (N is an integer not less than 2) to define a level of grayscale having 2 to the N'th power kinds;

a length of each of said second sub-field periods is equal to a length of a period to display a level of grayscale defined by a least significant bit in high-order M bits in said N bits;

the number of said plurality of second sub-field periods is equal to a maximum value specified by said M bits;

a length of each of said first sub-field periods is equal to a length of a period to display a level of grayscale defined by a least significant bit in low-order (N − M) bits in said N bits; and

the number of said plurality of first sub-field periods is equal to a maximum value specified by said (N − M) bits.

14. A driving method of an electro-optic element for allowing said electro-optic element to display a level of grayscale said electro-optic element should display throughout a plurality of frame periods by switching ON said electro-optic element during a period corresponding to grayscale data that defines said level of grayscale, said method being characterized by comprising:

a selecting step of sequentially selecting, according to said grayscale data and in each of said frame periods, a plurality of first sub-field periods continuous with respect to one another and a plurality of second sub-field periods continuous with respect to one another used for specifying the period corresponding to said grayscale data and included in each frame period forming said plurality of frame periods, said plurality of second sub-field periods following consecutively said plurality of first sub-field periods, each of said plurality of second sub-field periods having a length equal to or more than a length of a sum of all first sub-field periods included in said plurality of frame periods, in a direction from a first sub-field period and a second sub-field period positioned abut on a boundary of said plurality of first sub-field periods and said plurality of second sub-field periods toward a first sub-field period and a second sub-field period at a remotest position from said boundary; and

a driving step of, in each of said frame periods, switching ON said electro-optic element during said sub-field periods selected.

15. The driving method of an electro-optic element according to Claim 14, wherein, in said selecting step, the number of first sub-field periods to be selected in each of said frame periods is determined by, of said grayscale data, a grayscale data portion defining a level of grayscale that should be displayed throughout said plurality of first sub-field periods included in said plurality of frame periods.

16.   The driving method of an electro-optic element according to Claim 14, wherein, in said selecting step, a selection is made according to a table that defines a correspondence of said level of grayscale that should be displayed throughout said plurality of frame periods and a position of sub-field periods to be selected from said plurality of first sub-field periods and said plurality of second sub-field periods in each of said frame periods.

17.   The driving method of an electro-optic element according to Claim 14, wherein, when said second sub-field periods are selected in said selecting step,

in said driving step, of said second sub-field periods selected, at least one second sub-field period is divided into a plurality of divided periods to be switched ON.

18.   The driving method of an electro-optic element according to Claim 17, wherein, in said driving step, of said second sub-field periods selected, a second sub-field period positioned near said boundary is divided with priority to be switched ON.

19.   The driving method of an electro-optic element according to Claim 18, wherein, when two or more of said second sub-field periods are selected in said selecting step,

in said driving step, said two or more second sub-field periods selected which are of second sub-field periods adjacent to each other, a second sub-field period farther from said boundary is divided to be switched ON with the number of division made equal to or less than the number of division of a second sub-field period nearer said boundary.

20.   The driving method of an electro-optic element according to Claim 17, wherein, in said driving step, all of said second sub-field periods selected are divided to be switched ON.

21.   The driving method of an electro-optic element according to Claim 17, wherein, in said driving step, at least one divided period of said plurality of divided periods is equivalent to one first sub-field period.

22.   The driving method of an electro-optic element according to Claim 14, wherein:

said grayscale data is composed of N bits (N is an integer not less than 2) to define a level of grayscale having 2 to the N'th power kinds;

high-order M bits in said N bits define a level of grayscale said plurality of second sub-field periods should display;

low-order (N − M) bits in said N bits define a level of grayscale said plurality of first sub-field periods should display; and

said M is an optimal solution of M given on an assumption that each of said frame periods includes $(2^{N-M} - 1)/F$ (F represents the number of said plurality of frame periods) first sub-field periods.

23. The driving method of an electro-optic element according to Claim 22, wherein in case that said $(2^{N-M} - 1)/F$ leaves a remainder, a quotient of said $(2^{N-M} - 1)/F$ plus one is given as the number of said first sub-field periods.

24. A driving method of an electro-optic element for allowing said electro-optic element to display a level of grayscale with a frame period made as a unit, said method being characterized by comprising

a selecting step of sequentially selecting, according to values represented by low-order bits of data defining said level of grayscale, two or more first sub-field periods, which are adjacent to each other on one side of either before or after in time with respect to a reference point existing within said frame period and for switching ON or OFF said electro-optic element, toward said one side from said reference point, and

along with this, sequentially selecting, according to values represented by high-order bits except said low-order bits of said data, second sub-field periods with one period set equal to or longer than a sum of said plurality of first sub-field periods, which second sub-field periods are one or more second sub-field periods existing or adjacent to each other on the other side of either before or after in time with respect to said reference point and, along with this, for switching ON or OFF said electro-optic element, toward said other side from said reference point; and

a driving step of continuously switching ON (or OFF) said electro-optic element during said first and second sub-field periods selected.

25. The driving method of an electro-optic element according to Claim 24, wherein, when said second sub-field periods are selected in said selecting step,

in said driving step, of said second sub-field periods selected, at least one second sub-field period is divided into a plurality of divided periods to be switched ON.

26. The driving method of an electro-optic element according to Claim 25, wherein, in said driving step, of said second sub-field periods selected, a second sub-field period positioned near said boundary is divided with priority to be switched ON.

27. The driving method of an electro-optic element according to Claim 26, wherein, when two or more of said second sub-field periods are selected in said selecting step,

in said driving step, of said two or more second sub-field periods selected which are second sub-field periods adjacent to each other, a second sub-field period farther from said boundary is divided to be switched ON with the number of division being equal to or less than the number of division of a second sub-field period nearer said boundary.

28.   The driving method of an electro-optic element according to Claim 24, wherein, in said driving step, all of said second sub-field periods selected are divided to be switched ON.

29.   The driving method of an electro-optic element according to Claim 24, wherein, in said driving step, at least one divided period of said plurality of divided periods is equivalent to one first sub-field period.

30.   A driving device of an electro-optic element for allowing said electro-optic element to display a level of grayscale said electro-optic element should display throughout a frame period by switching ON said electro-optic element during a period corresponding to grayscale data that defines said level of grayscale, said device being characterized by comprising:

a selecting circuit for sequentially selecting, according to said grayscale data, a plurality of first sub-field periods continuous with respect to one another and a plurality of second sub-field periods continuous with respect to one another used for specifying the period corresponding to said grayscale data, said plurality of second sub-field periods following consecutively said plurality of first sub-field periods, each of said plurality of second sub-field periods substantially corresponding to a length of a sum of said plurality of first sub-field periods and any one of first sub-field periods, in a direction from a first sub-field period and a second sub-field period positioned abut on a boundary of said plurality of first sub-field periods and said plurality of second sub-field periods toward a first sub-field period and a second sub-field period at a remotest position from said boundary; and

a driving circuit for switching ON said electro-optic element during said sub-field periods selected.

31.   A driving device of an electro-optic element for allowing said electro-optic element to display a level of grayscale said electro-optic element should display throughout a plurality of frame periods by switching ON said electro-optic element during a period corresponding to grayscale data that defines said level of grayscale, said device being characterized by comprising:

a selecting circuit for sequentially selecting, according to said grayscale data and in each of said frame periods, a plurality of first sub-field periods continuous with respect

to one another and a plurality of first sub-field periods continuous with respect to one another used for specifying the period corresponding to said grayscale data and included in each of said frame periods, said plurality of second sub-field periods following consecutively said plurality of first sub-field periods, each of said plurality of second sub-field periods having a length equal to or more than a length of a sum of all first sub-field periods included in said plurality of frame periods, in a direction from a first sub-field period and a second sub-field period positioned abut on a boundary of said plurality of first sub-field periods and said plurality of second sub-field periods toward a first sub-field period and a second sub-field period at a remotest position from said boundary; and

a driving circuit for, in each of said frame periods, switching ON said electro-optic element during said sub-field periods selected.

32.   A driving device of an electro-optic element for allowing said electro-optic element to display a level of grayscale with a frame period made as a unit, said device being characterized by comprising:

a selecting circuit for sequentially selecting, according to values represented by low-order bits of data defining said level of grayscale, two or more first sub-field periods, which are adjacent to each other on one side of either before or after in time with respect to a reference point existing within said frame period and for switching ON or OFF said electro-optic element, toward said one side from said reference point, and

along with this, sequentially selecting, according to values represented by high-order bits except said low-order bits of said data, second sub-field periods with one period set equal to or longer than a sum of said plurality of first sub-field periods, which second sub-field periods are one or more second sub-field periods existing or adjacent to each other on the other side of either before or after in time with respect to said reference point and, along with this, for switching ON or OFF said electro-optic element, toward said other side from said reference point; and

a driving circuit for continuously switching ON (or OFF) said electro-optic element during said first and second sub-field periods selected.

33.   Electronic equipment characterized by comprising:

a display device, including a plurality of electro-optic elements aligned in a matrix, for displaying an image related to said electronic equipment; and

said driving device of an electro-optic element according to Claim 30.

34.   Electronic equipment characterized by comprising:

a display device, including a plurality of electro-optic elements aligned in a matrix, for displaying an image related to said electronic equipment; and

said driving device of an electro-optic element according to Claim 31.

35.   Electronic equipment characterized by comprising:

a display device, including a plurality of electro-optic elements aligned in a matrix, for displaying an image related to said electronic equipment; and

said driving device of an electro-optic element according to Claim 32.